

**At A Glance**  
**Proposed Pesticide Container and Containment Regulations**  
**Updated to Include Information from the 1999 Supplemental Notice**

The purpose of this document is to provide an outline of many of the requirements of the 1994 proposed regulations, Standards for Pesticide Containers and Containment, and to highlight the potential changes that were discussed and considered in the 1999 supplemental Federal Register notice. This document is provided to facilitate the public's ability to respond to the 2004 notice that reopens the comment period on the proposed rule.

Because this is a summary, many details are not included. Refer to the proposed regulatory text (59 FR 6776-6789; February 11, 1994) and the supplemental Federal Register notice (64 FR 56918-56944; October 21, 1999) for complete details.

This document includes the following pieces:

1. A one-page overview of who must comply, the pesticides that must comply, a list of major requirements and the compliance period for each of the five kinds of proposed regulatory standards (as updated by the 1999 supplemental notice).
2. A two- or three-page summary of each of the five kinds of proposed regulatory standards (as updated by the 1999 supplemental notice), addressing:
  - Nonrefillable containers;
  - Refillable containers: technical standards;
  - Refillable containers: repackaging procedural standards;
  - Container labeling; and
  - Containment structures.

Potential changes that were discussed and considered in the supplemental notice are indicated in **red** text to highlight them.

## Overview of the Proposed Pesticide Container and Containment Regulations as Updated by the 1999 Supplemental Notice

Category	Non refillable Containers	Refillable Containers: Technical Standards	Refillable Containers: Repackaging Procedural Standards	Container Labeling	Containment Structures
Who must comply	<ul style="list-style-type: none"> <li>• Registrants</li> </ul>	<ul style="list-style-type: none"> <li>• Registrants</li> </ul>	<ul style="list-style-type: none"> <li>• Registrants</li> <li>• Refillers (registrants, retailers, distributors)</li> </ul>	<ul style="list-style-type: none"> <li>• Registrants</li> <li>• Pesticide users (must follow new directions)</li> </ul>	<ul style="list-style-type: none"> <li>• Ag retailers</li> <li>• Ag comm applicators</li> <li>• Ag custom blenders</li> </ul>
Pesticides that must comply	<ul style="list-style-type: none"> <li>• Manufacturing use products are exempt.</li> <li>• Certain antimicrobial pesticides are exempt, but many must comply with most of the container-related regulations.</li> <li>• Other pesticides must comply if they meet criteria based on toxicity category, container capacity and environmental hazard statements.</li> </ul>			All pesticides	Agricultural pesticides
Major Requirements  * There may be changes to the standard based on the DOT provision.	<ul style="list-style-type: none"> <li>• Dept. of Transportation (DOT) container design, construction and marking standards</li> <li>• Container integrity*</li> <li>• Permanent marking*</li> <li>• Container dispensing capability*</li> <li>• Standardized closures</li> <li>• Residue removal</li> <li>• Submit certification*</li> <li>• Recordkeeping*</li> </ul>	<ul style="list-style-type: none"> <li>• Dept. of Transportation (DOT) container design, construction and marking standards</li> <li>• Container integrity*</li> <li>• Permanent marking*</li> <li>• Drop test*</li> <li>• One-way valves or tamper-evident devices</li> <li>• Vent, gauge &amp; shutoff valve standards</li> <li>• Submit certification*</li> <li>• Recordkeeping*</li> </ul>	<ul style="list-style-type: none"> <li>• Registrants and refillers comply with specified conditions</li> <li>• Registrants develop and provide certain information</li> <li>• Refillers (registrants and others) obtain and follow registrant information, and clean, inspect and label containers before refilling them*</li> </ul>	<ul style="list-style-type: none"> <li>• Identify container as nonrefillable or refillable (<i>all</i>)</li> <li>• Statement to prohibit reuse and offer for recycling; batch code (<i>all nonrefillables</i>)</li> <li>• Cleaning instructions (<i>some nonrefillables</i>)</li> <li>• Cleaning instructions before final disposal (<i>all refillables</i>)</li> </ul>	<ul style="list-style-type: none"> <li>• Secondary containment structures (dikes) around bulk tanks</li> <li>• Containment pads for pesticide dispensing areas</li> <li>• Different standards for existing &amp; new structures for first 10 years</li> <li>• Standards for all structures address material, hydraulic conductivity, water</li> <li>• Good operating procedures</li> <li>• Monthly inspections of tanks and structures</li> <li>• Recordkeeping</li> </ul>
Compliance Period	<ul style="list-style-type: none"> <li>• Two years for pesticides sold or distributed by registrants.</li> <li>• Five years for pesticides sold or distributed by others.</li> </ul>	Two years for all pesticides in refillable containers.	Two years for all pesticides in refillable containers.	Two years for pesticides sold or distributed by registrants.	<ul style="list-style-type: none"> <li>• Two years for existing structures to meet interim standards and for new structures to meet full standards.</li> <li>• Ten years for existing structures to meet full standards.</li> </ul>

**Proposed Regulations (as Updated by the 1999 Supplemental Notice): Nonrefillable Containers**

Short Description	Reg Cite	Requirement
<b>SCOPE AND APPLICABILITY</b>		
Who must comply	165.100	Registrants
Pesticides that must comply	165.100(b) <sup>1</sup>	Manufacturing use products are exempt.
	165.100(c) <sup>1</sup>	<ul style="list-style-type: none"> <li>Household, institutional and industrial antimicrobial pesticides that are not subject to RCRA and that are in Toxicity Category I must comply with the regulations except for the standardized closure and residue removal standards.</li> <li>Household, institutional and industrial antimicrobial pesticides that are not subject to RCRA and that are in Toxicity Category II, III or IV are exempt.</li> </ul>
	165.100(d) <sup>1</sup>	<p>All other products must comply with the regulations if they meet at least one of the following criteria:</p> <ul style="list-style-type: none"> <li>Toxicity Category I or II;</li> <li>The container size is ≥ 5 liters (1.3 gallons) for liquid or 5 kilograms (11 pounds) for solid formulations; or</li> <li>The pesticide is used outdoors and the label includes an environmental hazard statement about wildlife, fish, birds, or groundwater.</li> </ul>
<b>CONTAINER DESIGN STANDARDS</b>		
Reporting incidents	165.102(a)(2)	Information on container failures or other incidents may be reportable under section 6(a)(2).
DOT regulations	165.102(a)(3)	Delete. This proposed provision would not be necessary if the regulations referred to and adopted some of the DOT regulations. <sup>1</sup>
Container integrity	165.102(b)	Delete. This proposed provision would be replaced by a DOT equivalent standard. <sup>1</sup>
DOT container design, construction and marking	165.102(b) <sup>1</sup>	<ul style="list-style-type: none"> <li>Pesticides that are DOT hazardous materials must be packaged as required by the DOT hazardous materials regulations (HMR).</li> <li>Pesticides that are not DOT hazardous materials must be packaged in containers that are designed, constructed and marked to comply with a subset of the DOT HMR at the packing group III level. <sup>2</sup></li> <li>Limited quantities of pesticides that are not DOT hazardous materials may comply with a smaller subset of the DOT HMR.</li> <li>Registrants can request a modification to or waiver from these requirements. EPA can grant a modification or waiver if the registrant shows that the alternative set of standards achieves a level of safety that is at least equal to that specified by these requirements.</li> <li>If DOT proposes to change any of the incorporated DOT regulations, EPA will provide notice in the Federal Register.</li> </ul>
Permanent marking	165.102(c)	<ul style="list-style-type: none"> <li>The container must be permanently marked <sup>3</sup> with: (1) the EPA registration number of the pesticide <del>and (2) the name, symbol or code of the material(s) of construction</del>. The proposed provision for marking the container material would be replaced by a DOT equivalent standard. <sup>4</sup></li> <li>Applies to all containers and all pesticides subject to the regulations.</li> </ul>

Short Description	Reg Cite	Requirement
Container dispensing capability	165.102(d)	<ul style="list-style-type: none"> <li>The container must: (1) allow the contents to pour in a continuous, coherent stream (without “glugging”); (2) eliminate dripping, <del>and (3) reclose securely.</del> The proposed provision for reclosing securely would be replaced by a DOT equivalent standard. <sup>4</sup></li> <li>Applies to containers holding liquid pesticides.</li> </ul>
Standardized closures	165.102(e)	<ul style="list-style-type: none"> <li>The container must have one of four specified closures, which include two bungs and two screw caps.</li> <li>Applies to liquid agricultural pesticides in containers that are rigid and have capacities equal to or larger than 3.0 liters (0.79 gallons).</li> <li>Does not apply to aerosol and pressurized containers.</li> <li>Does not apply to household, institutional and industrial antimicrobial pesticides that are not subject to RCRA and that are in Toxicity Category I.</li> </ul>
<b>RESIDUE REMOVAL STANDARDS</b>		
Residue removal standard	165.104(b)(1)	<ul style="list-style-type: none"> <li>Each container and formulation combination must achieve at least 99.9999 percent removal <sup>5</sup> using the prescribed testing methodology.</li> <li>Applies to dilutable pesticides in rigid containers.</li> <li>Does not apply to household, institutional and industrial antimicrobial pesticides that are not subject to RCRA and that are in Toxicity Category I.</li> </ul>
Good Laboratory Practices (GLP)	165.104(b)(2)	The residue removal testing must be conducted in accordance with the GLP Standards in 40 CFR Part 160.
Testing methodology	165.106	This section describes the testing methodology, including a minimum sample of 19 containers, the temperature and volume of the water used to rinse the container, a description of the process, the analysis methods, and how to calculate the percent removal.
<b>ADMINISTRATIVE STANDARDS</b>		
Certification	165.111	<ul style="list-style-type: none"> <li>Registrants must submit a certification that all nonrefillable containers used to sell or distribute a pesticide meet the nonrefillable container standards.</li> <li>The DOT HMR include provisions for certification for the standards in the HMR. However, EPA may choose to retain the proposed certification requirements for the pesticide-specific requirements. <sup>4</sup></li> </ul>
Recordkeeping	165.114	<ul style="list-style-type: none"> <li>Registrants must keep records to show compliance with the certification, container dispensing, standard closure and residue removal standards.</li> <li>The DOT HMR include provisions for recordkeeping for the standards in the HMR. However, EPA may choose to retain the proposed recordkeeping requirements for the pesticide-specific requirements. <sup>4</sup></li> </ul>
Compliance dates	165.117	<ul style="list-style-type: none"> <li>Within two years: pesticides sold or distributed by registrants must be in compliance and certifications for existing pesticides must be submitted to and received by EPA.</li> <li>Within five years: pesticides sold or distributed by persons other than registrants must be in compliance.</li> </ul>

Short Description	Reg Cite	Requirement
Waiver from standardized closure requirement	165.119	<ul style="list-style-type: none"> <li>• Registrants can follow the procedure in this section to request a waiver from the standardized closure requirement.</li> <li>• It also describes the standards that must be met before EPA will approve a non-standardized closure.</li> <li>• Does not apply to household, institutional and industrial antimicrobial pesticides that are not subject to RCRA and that are in Toxicity Category I.</li> </ul>

#### Notes

1. These regulatory citations refer to the potential alternative regulatory text in Unit VII of the 1999 supplemental Federal Register notice (64 FR 56939-56940).
2. In particular, pesticides that are not DOT hazardous materials must be packaged in containers that are designed, constructed, and marked to comply with the requirements of 49 CFR 173.24, 173.24a, 173.24b, 173.28, 173.203, 173.213, 173.240, 173.241, Part 178, and Part 180 as applicable to a Packing Group III material, liquid or solid, as appropriate.
3. Permanent marking was described in the preamble (59 FR 6721) to include, but not be limited to, etching, embossing, ink jetting, stamping, heat stamping, mechanically attaching a plate, molding, or marking with durable ink.
4. The proposed requirements that EPA may replace with DOT equivalent standards in the final rule are identified in Table 6 of the supplemental notice (59 FR 56934).
5. Percent removal represents the percent of original concentration of the active ingredient when compared to the concentration of the active ingredient in the fourth rinse.

**Proposed Regulations (as Updated by the 1999 Supplemental Notice): Refillable Containers - Technical Standards**

Short Description	Reg Cite	Requirement
<b>SCOPE AND APPLICABILITY</b>		
Who must comply	165.122(a)	Registrants
Pesticides that must comply	165.120(b) <sup>1</sup>	Manufacturing use products are exempt.
	165.120(c) <sup>1</sup>	<ul style="list-style-type: none"> <li>Household, institutional and industrial antimicrobial pesticides that are not subject to RCRA and that are in Toxicity Category I must comply with all of the refillable container regulations except for those pesticides that are used in swimming pools, which are exempt from the permanent marking, one-way valve/tamper-evident device, relabeling and some recordkeeping standards.</li> <li>Household, institutional and industrial antimicrobial pesticides that are not subject to RCRA and that are in Toxicity Category II, III or IV are exempt.</li> </ul>
	165.120(d) <sup>1</sup>	<p>All other products must comply with the regulations if they meet at least one of the following criteria:</p> <ul style="list-style-type: none"> <li>Toxicity Category I or II;</li> <li>The container size is ≥ 5 liters (1.3 gallons) for liquid or 5 kilograms (11 pounds) for solid formulations; or</li> <li>The pesticide is used outdoors and the label includes an environmental hazard statement about wildlife, fish, birds, or groundwater.</li> </ul>
<b>CONTAINER DESIGN STANDARDS</b>		
Reporting incidents	165.124(a)(2)	Information on container failures or other incidents may be reportable under section 6(a)(2).
DOT regulations	165.124(a)(3)	Delete. This proposed provision would not be necessary if the regulations referred to and adopted some of the DOT regulations. <sup>1</sup>
Permanent marking	165.124(b)	<ul style="list-style-type: none"> <li>All refillable containers must be permanently marked <sup>2</sup> with the: <del>(1) container manufacturer; (2) model number; (3) date of manufacture; (4) capacity; (5) material(s) of construction;</del> (6) serial number; and (7) “Meets EPA standards for refillable containers. The first five items in the proposed provision for marking would be replaced by equivalent DOT standards. <sup>3</sup></li> <li>Compliance with DOT-required marking of any of this information satisfies the requirement.</li> <li>Does not apply to household, institutional and industrial antimicrobial pesticides that are not subject to RCRA, that are in Toxicity Category I, and that are used in swimming pools.</li> </ul>
Container integrity (for minibulks) <sup>4</sup>	165.124(c)	Delete. This proposed provision would be replaced by a DOT equivalent standard. <sup>1</sup>

Short Description	Reg Cite	Requirement
DOT container design, construction and marking	165.124(c) <sup>1</sup>	<ul style="list-style-type: none"> <li>• Pesticides that are DOT hazardous materials must be packaged as required by the DOT hazardous materials regulations (HMR).</li> <li>• Pesticides that are not DOT hazardous materials must be packaged in containers that are designed, constructed and marked to comply with a subset of the DOT HMR at the packing group III level. <sup>5</sup></li> <li>• Limited quantities of pesticides that are not DOT hazardous materials may comply with a smaller subset of the DOT HMR.</li> <li>• Registrants can request a modification to or waiver from these requirements. EPA can grant a modification or waiver if the registrant shows that the alternative set of standards achieves a level of safety that is at least equal to that specified by these requirements.</li> <li>• If DOT proposes to change any of the incorporated DOT regulations, EPA will provide notice in the Federal Register.</li> </ul>
Drop test (for minibulks)	165.124(d)	Delete. This proposed provision would be replaced by a DOT equivalent standard. <sup>3</sup>
Good Laboratory Practices (GLP)	165.124(d)(3)	Delete. This proposed provision would be replaced by a DOT equivalent standard. <sup>3</sup>
One-way valves or tamper-evident devices (for liquid minibulks)	165.124(e)	<ul style="list-style-type: none"> <li>• Each opening of a liquid minibulk container must have a one-way valve, a tamper-evident device, or both.</li> <li>• Does not apply to household, institutional and industrial antimicrobial pesticides that are not subject to RCRA, that are in Toxicity Category I, and that are used in swimming pools.</li> </ul>
Container integrity (for bulk containers) <sup>4</sup>	165.124(f)(1)	<ul style="list-style-type: none"> <li>• Applies to bulk containers at refilling establishments.</li> <li>• Bulk containers must be resistant to extreme changes in temperature and be constructed of materials that are adequately thick and that are resistant to corrosion, puncture and cracking.</li> <li>• Bulk containers must be capable of withstanding all operating stresses.</li> </ul>
Vent, gauge, and shutoff valve standards (for liquid bulk containers)	165.124(f)(2)-(4)	<ul style="list-style-type: none"> <li>• Applies to liquid bulk containers at refilling establishments.</li> <li>• Each liquid bulk container must have a vent.</li> <li>• External site gauges are prohibited on liquid bulk containers.</li> <li>• Each liquid bulk container must have a shut off valve.</li> </ul>
Drop test methodology	165.125	Delete. This proposed provision would be replaced by a DOT equivalent standard. <sup>3</sup>
<b>ADMINISTRATIVE STANDARDS</b>		
Certification	165.126	<ul style="list-style-type: none"> <li>• Registrants must submit a certification that all refillable containers used to sell or distribute a pesticide meet the refillable container standards.</li> <li>• The DOT HMR include provisions for certification for the standards in the HMR. However, EPA may choose to retain the proposed certification requirements for the pesticide-specific requirements. <sup>3</sup></li> </ul>
Recordkeeping	165.128	<ul style="list-style-type: none"> <li>• Registrants must keep records to show compliance with the certification and drop test standards.</li> <li>• The DOT HMR include provisions for recordkeeping for the standards in the HMR. However, EPA may choose to retain the proposed recordkeeping requirements for the pesticide-specific requirements. <sup>3</sup></li> </ul>

Short Description	Reg Cite	Requirement
Compliance dates	165.139	Within two years: all pesticides sold or distributed in refillable containers must be in compliance and certifications for existing pesticides must be submitted to and received by EPA.

#### Notes

1. These regulatory citations refer to the potential alternative regulatory text in Unit VII of the 1999 supplemental Federal Register notice (64 FR 56939-56940).

2. Permanent marking was described in the preamble (59 FR 6721) to include, but not be limited to, etching, embossing, ink jetting, stamping, heat stamping, mechanically attaching a plate, molding, or marking with durable ink.

3. The proposed requirements that EPA may replace with DOT equivalent standards in the final rule are identified in Table 6 of the supplemental notice (59 FR 56934).

4. Minibulk and bulk containers are defined in the proposed regulations as:

- Liquid minibulk container means a refillable container designed and constructed to hold liquid pesticide formulations with the capacity to hold undivided quantities of less than or equal to 3,000 liters (793 gallons).
- Dry minibulk container means a refillable container designed and constructed to hold only dry pesticide formulations with the capacity to hold undivided quantities of less than or equal to 2,000 kilograms (4,409 pounds).
- Liquid bulk container means a refillable container designed and constructed to hold liquid pesticide formulations with the capacity to hold undivided quantities of greater than 3,000 liters (793 gallons).
- Dry bulk container means a refillable container designed and constructed to hold only dry pesticide formulations with the capacity to hold undivided quantities of greater than 2,000 kilograms (4,409 pounds).

5. In particular, pesticides that are not DOT hazardous materials must be packaged in containers that are designed, constructed, and marked to comply with the requirements of 49 CFR 173.24, 173.24a, 173.24b, 173.28, 173.203, 173.213, 173.240, 173.241, Part 178, and Part 180 as applicable to a Packing Group III material, liquid or solid, as appropriate.



**Proposed Regulations (as Updated by the 1999 Supplemental Notice): Refillable Containers - Repackaging  
Procedural Standards**

Short Description	Reg Cite	Requirement
<b>SCOPE AND APPLICABILITY</b>		
Who must comply	165.122(a)	<ul style="list-style-type: none"> <li>• Registrants</li> <li>• Refillers <sup>1</sup></li> </ul>
Pesticides that must comply	165.120(b) <sup>2</sup>	Manufacturing use products are exempt.
	165.120(c) <sup>2</sup>	<ul style="list-style-type: none"> <li>• Household, institutional and industrial antimicrobial pesticides that are not subject to RCRA and that are in Toxicity Category I must comply with all of the refillable container regulations except for those pesticides that are used in swimming pools, which are exempt from the permanent marking, one-way valve/tamper-evident device, relabeling and some recordkeeping standards.</li> <li>• Household, institutional and industrial antimicrobial pesticides that are not subject to RCRA and that are in Toxicity Category II, III or IV are exempt.</li> </ul>
	165.120(d) <sup>2</sup>	<p>All other products must comply with the regulations if they meet at least one of the following criteria:</p> <ul style="list-style-type: none"> <li>• Toxicity Category I or II;</li> <li>• The container size is ≥ 5 liters (1.3 gallons) for liquid or 5 kilograms (11 pounds) for solid formulations; or</li> <li>• The pesticide is used outdoors and the label includes an environmental hazard statement about wildlife, fish, birds, or groundwater.</li> </ul>
<b>CONDITIONS FOR REPACKAGING</b>		
Conditions	165.129	<p>A registrant may allow a refiller to repackage its pesticide into refillable containers and to sell or distribute that pesticide if all of these conditions are met:</p> <ul style="list-style-type: none"> <li>• There is no change in the pesticide formulation.</li> <li>• The pesticide is repackaged at a registered producing establishment (per §167.20).</li> <li>• The registrant has entered into a written contract with the refiller or has provided the refiller with written authorization to refill the pesticide.</li> <li>• The pesticide is repackaged only into refillable containers that meet the regulatory standards.</li> <li>• The pesticide is labeled and there are no changes to the label other than adding the appropriate net contents and EPA establishment number.</li> </ul>
<b>REGISTRANT RESPONSIBILITIES</b>		
Provide contract or authorization	165.130(a)(1)	A registrant must provide the written contract or authorization to a refiller before selling or distributing pesticide to the refiller.
Pesticide integrity	165.130(a)(2)	Registrants are responsible for the integrity of pesticides repackaged by refillers operating under contract or authorization.
Develop information: cleaning procedure	165.130(b)(1)	Registrants must develop a written residue removal procedure (a cleaning procedure) that is adequate to ensure the integrity of the pesticide sold or distributed in the refillable containers.

Short Description	Reg Cite	Requirement
Develop information: list of acceptable containers	165.130(b)(2)	<ul style="list-style-type: none"> <li>• Registrants must develop a list of acceptable refillable containers that can be used to sell or distribute their pesticide.</li> <li>• The containers must meet the Part 165 standards and be compatible with the pesticide.</li> <li>• The containers must be identified by the container manufacturer and model number.</li> </ul>
Provide information	165.130(c)	Registrants must provide the cleaning procedure, list of acceptable containers and the pesticide's label before or at the time of distribution or sale of the pesticide to the refiller.
Recordkeeping	165.132	Registrants must keep the following records for as long as the registrant sells or distributes the pesticide in refillable containers and for three years after: (1) contract or authorization with each refiller; (2) cleaning procedure; and (3) list of acceptable containers.
<b>REFILLER RESPONSIBILITIES</b>		
Items in possession	165.134(a)	Before repackaging a pesticide, a refiller must have all of the following items: (1) written contract or authorization; (2) label and labeling; (3) cleaning procedure; and (4) list of acceptable containers.
Pesticide integrity	165.134(b)	Refillers are responsible for the integrity of pesticides they repackage.
Refilling conditions	165.134(c)	<ul style="list-style-type: none"> <li>• Refillers must repackage only into a container that is identified on the list of acceptable containers.</li> <li>• Refillers cannot change the pesticide formulation.</li> </ul>
Identify previous pesticide	165.134(d)	A refiller must identify the pesticide previously contained in the container (by looking at the label) to determine if it is necessary to clean the container.
Inspection	165.134(e)	<ul style="list-style-type: none"> <li>• A refiller must inspect the container before repackaging pesticide in to it. Conditions for failing the inspection are described.</li> <li>• The container inspection standard was included in Table 6 of the supplemental notice (59 FR 56934) as a proposed requirement that EPA may replace with a DOT equivalent standard in the final rule. However, it probably should have been included in the footnote to that table, which addressed the DOT certification and recordkeeping standards and stated that EPA may choose to retain the proposed requirements for the pesticide-specific requirements.<sup>3</sup></li> </ul>
Age of plastic liquid minibulk containers	165.134(f)	Delete. This proposed provision would be replaced by a DOT equivalent standard. <sup>3</sup>
Cleaning	165.134(g)	<p>A refiller must clean a refiller container according to the registrant's cleaning procedure unless all of these conditions are met:</p> <ul style="list-style-type: none"> <li>• Each tamper-evident device (if present) is intact.</li> <li>• The container previously held a pesticide with a single active ingredient and is being used to repackage a pesticide with the same active ingredient.</li> <li>• There is no reaction or interaction between the residue and the new pesticide that causes the new pesticide to be different than the composition described on its confidential statement of formula.</li> </ul>

Short Description	Reg Cite	Requirement
Quantity	165.134(h)	A refiller may repackage any quantity of a pesticide up to the rated capacity of the container.
Relabeling	165.134(i)	<ul style="list-style-type: none"> <li>• A refiller must securely attach the pesticide's label and must ensure that the net contents and EPA establishment number appear on the label.</li> <li>• Does not apply to household, institutional and industrial antimicrobial pesticides that are not subject to RCRA, that are in Toxicity Category I, and that are used in swimming pools.</li> </ul>
Recordkeeping - for each pesticide	165.136(a)	A refiller must keep the following records for as long as the refiller sells or distributes the pesticide in refillable containers and for three years after: (1) contract or authorization from the registrant; (2) cleaning procedure; and (3) list of acceptable containers.
Recordkeeping - return of containers	165.136(b)	<ul style="list-style-type: none"> <li>• A refiller must keep the following records for three years after receipt of a refillable container: (1) name and address of person providing the container; (2) serial number; (3) date the container was received; and (4) name and EPA registration number of the pesticide.</li> <li>• Does not apply to household, institutional and industrial antimicrobial pesticides that are not subject to RCRA, that are in Toxicity Category I, and that are used in swimming pools.</li> </ul>
Recordkeeping - refilling containers	165.136(c)	<ul style="list-style-type: none"> <li>• A refiller must keep the following records for three years after repackaging a pesticide into a refillable container: (1) name, EPA registration number and amount of the pesticide; (2) date of distribution or sale; (3) name and address of the consignee; (4) serial number; (5) a record that the container has been inspected and the results; (6) a record of whether the container was cleaned and, if not, an explanation.</li> <li>• Does not apply to household, institutional and industrial antimicrobial pesticides that are not subject to RCRA, that are in Toxicity Category I, and that are used in swimming pools.</li> </ul>
Compliance dates	165.139	Within two years: all pesticides sold or distributed in refillable containers must be in compliance.

#### Notes

1. Refiller is defined in the proposed regulations as a person who engages in the activity of repackaging pesticide into refillable containers. This could include a registrant, a person operating under contract to a registrant, or a person operating under written authorization from a registrant.

2. These regulatory citations refer to the potential alternative regulatory text in Unit VII of the 1999 supplemental Federal Register notice (64 FR 56939-56940).

3. The proposed requirements that EPA may replace with DOT equivalent standards in the final rule are identified in Table 6 of the supplemental notice (59 FR 56934).

**Proposed Regulations (as Updated by the 1999 Supplemental Notice): Container Labeling**

[This is the same as the proposed rule summary. The supplemental notice did not discuss changes to any of the labeling provisions.]

Short Description	Reg Cite	Requirement
<b>SCOPE AND APPLICABILITY</b>		
Who must comply	existing 40 CFR Part 156	<ul style="list-style-type: none"> <li>• Registrants must ensure that their labels comply with the standards.</li> <li>• Pesticide users must follow the new label directions.</li> </ul>
Pesticides that must comply	existing 40 CFR Part 156	All pesticides
<b>MODIFICATIONS TO EXISTING 40 CFR PART 156</b>		
Net contents	156.10(d)(7)	Add a paragraph to require a blank area on labels of pesticides packaged in refillable containers to allow the net contents to be marked in by refillers.
EPA establishment number	156.10(f)	Modify the existing paragraph to require a blank area on labels of pesticides packaged in refillable containers to allow the EPA establishment number to be marked in by refillers.
Storage and disposal instructions	156.10(i)(2)(ix)	Modify the existing paragraph to refer to other changes made by this proposed rule.
<b>IDENTIFICATION OF CONTAINER TYPES</b>		
Nonrefillable containers	156.140(a)(1)	The statement “Nonrefillable container. Do not reuse or refill this container. Offer for recycling if possible.” is required on the label or container of nonrefillable containers.
Batch code	156.140(a)(2)	A lot number or other batch code is required on the label or container of nonrefillable containers.
Refillable containers	156.140(b)	The statement “Refill this container only with pesticide. Do not reuse this container for any other purpose.” is required on the label or container of refillable containers.
<b>CLEANING INSTRUCTIONS FOR NONREFILLABLE CONTAINERS</b>		
Pesticides that must comply	156.144(d)(1)	Dilutable pesticides (liquid or dry) in rigid nonrefillable containers
Timing	156.144(d)(1)(i)	A statement about the timing of the rinsing, such as “Clean container immediately after emptying.” is required.
Rinsing procedure	156.144(d)(1)(ii) and (iii)	The label must include triple and/or pressure rinsing instructions.
Triple rinsing instructions	156.144(d)(1)(ii)(A)	“Triple rinse as follows: Empty the remaining contents of this container into application equipment, and drain for 30 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Agitate for 30 seconds. Pour rinsate into application equipment or store rinsate for later use or disposal. Drain for 30 seconds after the flow begins to drip. Repeat this procedure two more times.” (The statement for dry pesticides in §156.144(d)(1)(iii)(A) is similar.)

Short Description	Reg Cite	Requirement
Pressure rinsing instructions	156.144(d)(1)(ii)(B)	“Pressure rinse as follows: Empty the remaining contents of this container into application equipment, and continue to drain for 30 seconds after the flow begins to drip. Hold container over application equipment or collect rinsate for later use or disposal. Insert pressure rinsing nozzle, and rinse at 40 PSI for 30 seconds. Drain for 30 seconds after the flow begins to drip.” (The statement for dry pesticides in §156.144(d)(1)(iii)(B) is similar.)
Non-water diluent	156.144(d)(1)(iv)	A registrant must submit a request, meeting certain criteria, and receive approval from EPA before including cleaning instructions with a diluent other than water.
<b>CLEANING INSTRUCTIONS FOR REFILLABLE CONTAINERS</b>		
Pesticides that must comply	156.144(e)	All pesticides in all refillable containers
Timing	156.144(e)(1)	A statement about the timing of the rinsing, such as “Clean container before disposal.” is required.
Rinsing procedure	156.144(e)(2)(i) and (ii)	The label must include cleaning instructions before disposal that are appropriate for the characteristics of the pesticide and that are adequate to protect human health and the environment.
Residue removal instructions	156.144(e)(2)(iii)	The instructions could include any of the following: <ul style="list-style-type: none"> <li>• The cleaning procedure developed by the registrant for refillers;</li> <li>• Standard industry practices for cleaning refillable containers;</li> <li>• For dilutable pesticides, the statement: “Empty the remaining contents from this container. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.”</li> </ul>
<b>ADMINISTRATIVE STANDARDS</b>		
Compliance dates	156.144(f)	Within two years: pesticides sold or distributed by registrants must be in compliance.

**Proposed Regulations (as Updated by the 1999 Supplemental Notice): Containment Structures**

[This is the same as the proposed rule summary. The supplemental notice did not discuss changes to any of the labeling provisions.]

Short Description	Reg Cite	Requirement
<b>SCOPE AND APPLICABILITY</b>		
Who must comply	165.141	<ul style="list-style-type: none"> <li>• Refilling establishments whose principal business is retail sale</li> <li>• Custom blenders</li> <li>• Commercial applicators</li> </ul>
Pesticides that must comply	165.141	Agricultural pesticides
Bulk containers that are subject	165.142(a)	Stationary bulk containers <sup>1</sup> in affected facilities must have secondary containment except for: <ul style="list-style-type: none"> <li>• Empty containers;</li> <li>• Containers holding only rinsate or wash water and so labeled;</li> <li>• Containers holding pesticides which are gaseous at atmospheric temperature and pressure; and</li> <li>• Containers dedicated to non-pesticide use and so labeled.</li> </ul>
Pesticide dispensing areas that are subject	165.142(b)	Dispensing areas in affected facilities must have containment pads when: <ul style="list-style-type: none"> <li>• Dispensing pesticides from a stationary bulk container for any purpose</li> <li>• Dispensing from a container other than a stationary bulk container for refilling;</li> <li>• Emptying, cleaning or rinsing refillable containers; or</li> <li>• Filling a stationary bulk container from a transport vehicle.</li> </ul>
Define existing structure	165.144(a)	An existing containment structure is a structure for which installation began on or before [date 3 months after final rule published].
Define new structure	165.144(b)	A new containment structure is a structure for which installation began after [date 3 months after final rule published].
<b>GENERAL REQUIREMENTS FOR CONTAINMENT STRUCTURES</b>		
Material	165.146(a)(1) & (2)	<ul style="list-style-type: none"> <li>• All containment structures must be constructed of reinforced concrete or other rigid material which will withstand the full hydrostatic head and load placed on the structure.</li> <li>• Natural earthen material, unfired clay and asphalt are prohibited.</li> </ul>
Hydraulic conductivity	165.146(a)(3)	<ul style="list-style-type: none"> <li>• Existing structures must have hydraulic conductivity <math>\leq 1 \times 10^{-6}</math> cm/sec during the interim period. After the interim period, existing structures must comply with the requirements for new structures. <sup>2</sup></li> <li>• New structures must have hydraulic conductivity <math>\leq 1 \times 10^{-7}</math> cm/sec.</li> <li>• This can be met by use of structural materials, surface sealants or coatings, and/or a continuous liner at the bottom of the structure.</li> </ul>
Resistant to pesticide	165.146(a)(4)	All containment structures must be constructed of materials that are resistant to the pesticide.
Stormwater control	165.146(b)(1)	All containment structures must prevent water from seeping into or flowing onto them from adjacent land or structures during a 25-year 24-hour rain event.

Short Description	Reg Cite	Requirement
Support of appurtenances	165.146(b)(2)	Appurtenances and containers must be protected against damage from personnel and moving equipment.
Configuration of drains	165.146(b)(3)	<ul style="list-style-type: none"> <li>• For new structures, no outlets or drains are allowed through the base or wall and appurtenances must be configured so leaks can be readily observed.</li> <li>• Existing structures must meet this standard after the interim period.</li> </ul>
Operation	165.146(c)(1)-(4)	<p>These requirements apply to the operation of all containment structures:</p> <ul style="list-style-type: none"> <li>• Pesticides and pesticide-containing materials must be prevented from escaping.</li> <li>• All transfers of pesticides must be attended.</li> <li>• Lockable valves must be locked closed when the facility is unattended.</li> <li>• Spills and leaks must be cleaned up no later than end of the day.</li> <li>• Materials resulting from spills must be managed in accordance with applicable regulations.</li> </ul>
Inspection	165.146(d)(1)	The owner or operator must inspect containers, appurtenances and containment structures monthly when pesticides are stored or dispensed.
Maintenance	165.146(d)(2)-(3)	The owner or operator must repair areas showing damage and seal cracks and gaps. If the structure fails to meet all standards, no storage is allowed until repairs are made.
<b>SPECIFIC REQUIREMENTS FOR LIQUID BULK CONTAINMENT STRUCTURES</b>		
Capacity: liquid bulk storage	165.148(a)	<ul style="list-style-type: none"> <li>• During interim period, existing structures must have a capacity of 110% (for outdoor) or 100% (for indoor) of the largest stationary bulk container plus the displaced volume of other tanks and appurtenances. After the interim period, must comply with the requirement for new structures.</li> <li>• New structures must have a capacity of 125% (for outdoor) or 110% (for indoor) of the largest stationary bulk container plus the displaced volume of other tanks and appurtenances.</li> </ul>
Leak detection	165.148(b)(1)	<ul style="list-style-type: none"> <li>• For all new structures, leak detection must be assured by means such as elevation of the container.</li> <li>• After the interim period, existing structures must also comply with the leak detection standard.</li> </ul>
Elevated or anchored bulk containers	165.148(b)(2)	All stationary bulk containers must be adequately elevated or anchored to prevent flotation.
Inventory reconciliation	165.148(c)	During the interim period, any bulk container not elevated to allow for leak detection must be subject to inventory reconciliation on a monthly basis.
<b>SPECIFIC REQUIREMENTS FOR DRY BULK CONTAINMENT STRUCTURES</b>		
Capacity: dry bulk storage	165.150(b)	<ul style="list-style-type: none"> <li>• New structures must have a capacity of 100% of the largest stationary bulk container plus the displaced volume of other tanks and appurtenances.</li> <li>• After the interim period, existing structures must comply with the capacity requirement for new structures.</li> </ul>
<b>SPECIFIC REQUIREMENTS FOR CONTAINMENT PADS</b>		

Short Description	Reg Cite	Requirement
Capacity: containment pad	165.152(a)	All containment pads must have a capacity of: (1) 1000 gallons; or (2) 100% of the capacity of the largest container or equipment (if no container or equipment on the pad exceeds 1000 gallons).
Pad dimensions	165.152(b)(1)	<ul style="list-style-type: none"> <li>• All containment pads must be large enough to extend beneath all containers on pad except for transport vehicles.</li> <li>• For transport vehicles, all containment pads must accommodate the portion of the vehicle where the delivery hose couples to the vehicle.</li> </ul>
Slope	165.152(b)(2)	<ul style="list-style-type: none"> <li>• For new containment pads, the surface must be sloped toward a liquid-tight sump.</li> <li>• Existing containment pads must comply with the slope requirement after the interim period.</li> </ul>
Material recovery	165.152(b)(3)	<ul style="list-style-type: none"> <li>• All containment pads must have a means of removing and recovering spilled, leaked or discharged material and rainfall.</li> <li>• Automatic pumps lacking automatic overflow cutoff switches are prohibited.</li> </ul>
<b>INTEGRATED SYSTEMS</b>		
Integrated systems	165.153	<ul style="list-style-type: none"> <li>• Containment pads and secondary containment units may be combined.</li> <li>• Multiple pesticides can be stored in same containment unit.</li> </ul>
<b>ADMINISTRATIVE STANDARDS</b>		
Compliance dates	165.156	<ul style="list-style-type: none"> <li>• 2 years for new structures to comply with the full standards.</li> <li>• 2 years for existing structures to comply with the interim standards.</li> <li>• 10 years for existing structures to comply with the full standards.</li> </ul>
Recordkeeping	165.157	<p>The owner or operator must maintain the following records for 3 years:</p> <ul style="list-style-type: none"> <li>• Inspection &amp; maintenance records of bulk tanks and containment structures;</li> <li>• Records of inventory reconciliation during interim period, if required;</li> </ul> <p>and</p> <ul style="list-style-type: none"> <li>• Records of how long non-stationary bulk tanks remain at the facility.</li> </ul> <p>The owner or operator must maintain confirmation of hydraulic conductivity and pesticide resistance for as long as the containment structure is in use and for 3 years after.</p>

#### Notes

1. A stationary bulk container is defined in the proposed regulations as a liquid bulk container or a dry bulk container that is fixed at a single facility or establishment or, if not fixed, remains at the facility or establishment for at least 14 consecutive days, during all of which time the container holds pesticide. A liquid bulk container is a refillable container designed and constructed to hold liquid pesticide formulations with the capacity to hold undivided quantities of greater than 3,000 liters (793 gallons). A dry bulk container is a refillable container designed and constructed to hold only dry pesticide formulations with the capacity to hold undivided quantities of greater than 2,000 kilograms (4,409 pounds).
2. Some requirements have different standards for existing containment structures based on the timing. In such cases, existing structures must comply with the interim standard within 2 years and the full standard within 10 years. On the other hand, new structures must comply with the full standards within 2 years.